



Revolution Overview

BALBOA
water group



Overview

REVOLUTION – Transforming the Control of Hot Tubs

Balboa's Revolution hot tub control is setting a new industry standard for unmatched system reliability, manufacturing flexibility and end user friendliness.

INCOMPARABLE SYSTEM RELIABILITY

Utilizing advanced technology and high temperature corrosion proof mission critical materials from the automotive and other industries, the Revolution hot tub control systems all but eliminate leaks due to corrosion or harsh chemicals. Together with a newly designed, energy efficient heating coil that reduces element failures due to rattling, Balboa is providing peace of mind for the end-user.

TIGHT SPOTS ARE A THING OF THE PAST

The Revolution sports a compact low profile package offering flexibility with mounting to give you the most in tub design and manufacturing line flexibility. A single model can be configured on the line to support various system configurations without adding additional skus – the Revolution expands the world for you.

POWERFUL, YET SIMPLE USERFACE

The sleek new topside panel includes a large easy to read back-lit LCD with simple to follow end user menus. With new press and hold button technology, setting temperature and other common tasks have been simplified. User navigation is intuitive and easier than ever, reducing customer service help calls.



revolution features

MANUFACTURED UNDER ONE OR MORE OF THESE PATENTS: U.S. PATENTS: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 B2, CANADIAN PATENT: 2342614, AUSTRILIAN PATENT: 2373248 OTHER PATENTS BOTH FOREIGN AND DOMESTIC APPLIED FOR AND PENDING. ALL SOFTWARE COPYRIGHT BALBOA WATER GROUP.

Consumer Interface Innovations

end user friendliness
easier to see and use in low light and at night



press and hold buttons provide scrolling capabilities for temperature, time of day etc.

tactile button feel
instant, positive feedback when button is pressed

bigger LCD display
1"x 2" display (easy to read)

display with backlight
easier to see

End User Friendliness



System Innovations



Heater Innovations

M7
patented technology that increases reliability

corrosion resistant heater elements materials
no brazing, no dissimilar metals, no welds

thermoplastic heater enclosure
high tech, high temp materials proven use in automotive & mission critical applications minimizes harmful effects of harsh chemicals on heater enclosure

titanium element option
standard unit ships with incoloy heater element with titanium, longer life element

coiled heater, lower watt density
relaxed bends, more heating area reduces hot spots

flow through heater design
maximizes water flow minimal loss due to element bi-directional flow for more flexibility in tub design and plumbing configurations

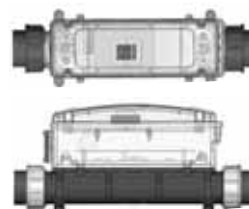


Inventory Innovations

50/60 Hz
systems available for domestic or export markets
reduces inventory needs
fewer skus

single skus
multiple configurations are picked via menus on the manufacturing line
reduced inventory need
fewer skus

low flow circ pumps configurations
special low flow adapter to support M7 more options for circ pump tubs



design flexibility
the ease with which the system can be modified for use in applications or environments other than those for which it was originally designed

bi-directional flow pressure or vacuum applications

compact footprint
1/2 cubic foot of space in tight equipment compartments needed

time outs settable
energy efficient savings based on manufacturers preferences, manages energy usage more efficiently – GREEN



End User Friendliness

user friendly menus
intuitive, easy navigation and option settings

english messages & error codes
text error messages clearly written and easy to understand for the consumer

Consumer Usability Innovations

user settable selections
day of week/time of day user preferences
more flexibility

temperature settings
50-104 – two temperature ranges
lower range allows for energy savings when spa is idle





TP600 Panel



TP400 Series Panel



Revolution 60 Hz (BP1500),
50 Hz (BP1600)

Transforming the Control of Hot Tubs

Revolution

Revolution Specifications

System Model

Revolution 60 Hz (BP1500), 50 Hz (BP1600)

Part Numbers

BP1500 (60Hz): 56125-02 4kW 800 Incoloy Element
56126-02 With 4kW Titanium Element

BP1600 (50Hz): 56129-02 3kW 800 Incoloy Element
56130-02 3kW Titanium Element

Topside Panels

TP600 Panel

AX10: One button

AX20: Two button

AX40: Four button

TP400 Series Panel

TP400T (Temp, Jets, Light, Aux)

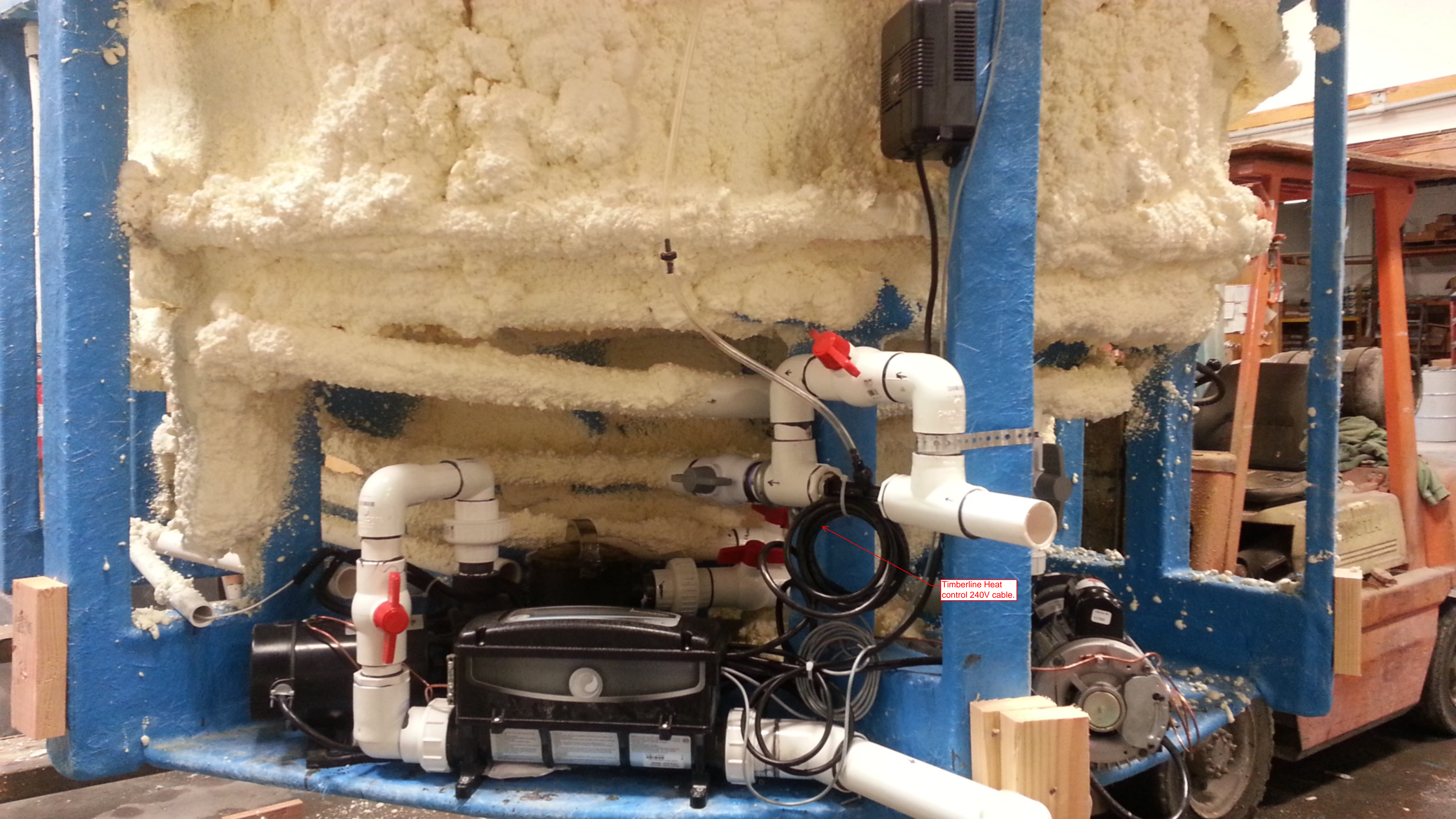
TP400W (Warm, Cool, Light, Jets)

Couplings (nuts and seals included)

Part No. 55911 2" Tailpieces (2-Speed Pump 1)

Part No. 55914 1.5" Tailpieces (2-Speed Pump 1)





Timberline Heat control 240V cable.

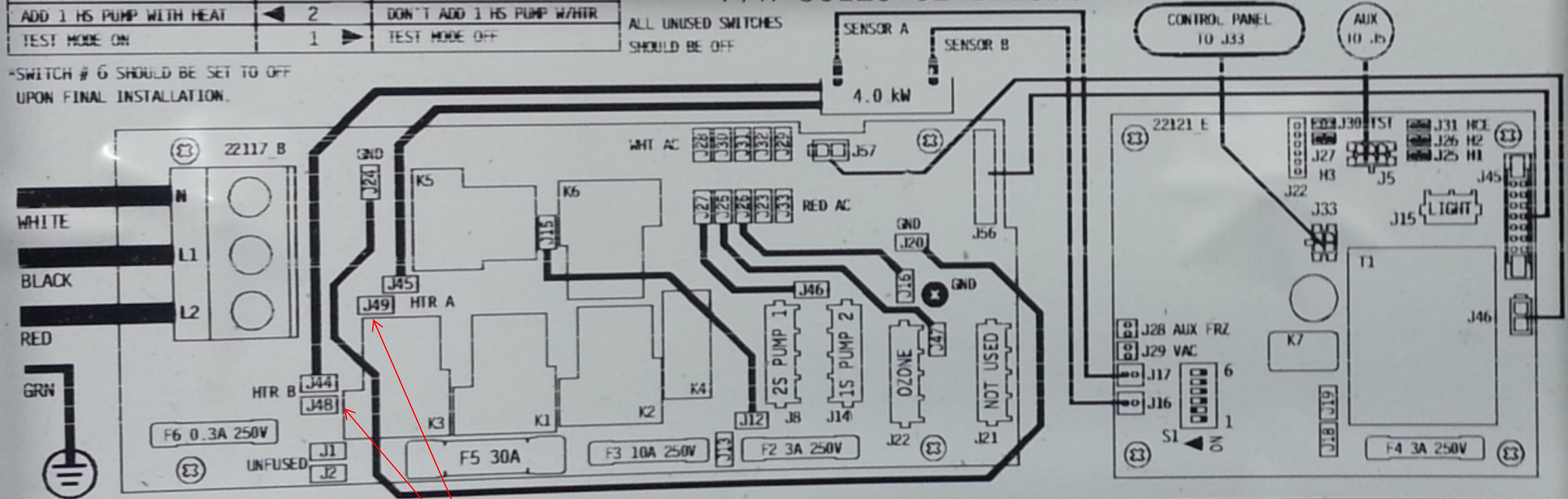
| ON POSITION | S1 SWITCH # | OFF POSITION |
|--------------------------|-------------|----------------------------|
| MEMORY RESET* | 6 ▶ | STORE SETTINGS* |
| SPECIAL AMPERAGE RULE ON | 5 ▶ | SPECIAL AMPERAGE RULE OFF |
| ADD 4 HS PUMPS WITH HEAT | 4 ▶ | DON'T ADD 4 HS PUMPS W/HTR |
| ADD 2 HS PUMPS WITH HEAT | 3 ▶ | DON'T ADD 2 HS PUMPS W/HTR |
| ADD 1 HS PUMP WITH HEAT | ◀ 2 | DON'T ADD 1 HS PUMP W/HTR |
| TEST MODE ON | 1 ▶ | TEST MODE OFF |

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P/N 56125-02 BP1500

WS01

ALL UNUSED SWITCHES SHOULD BE OFF

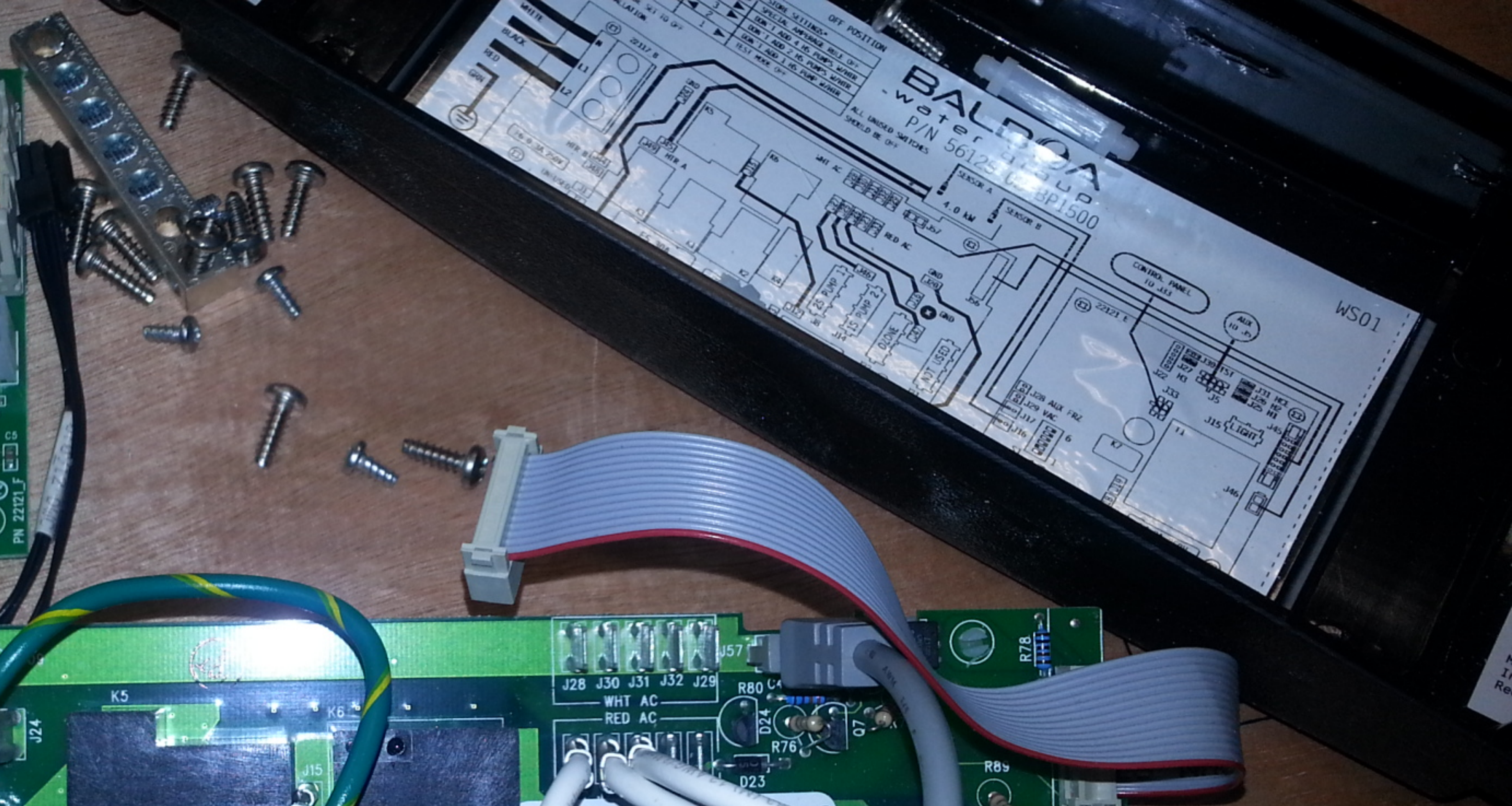
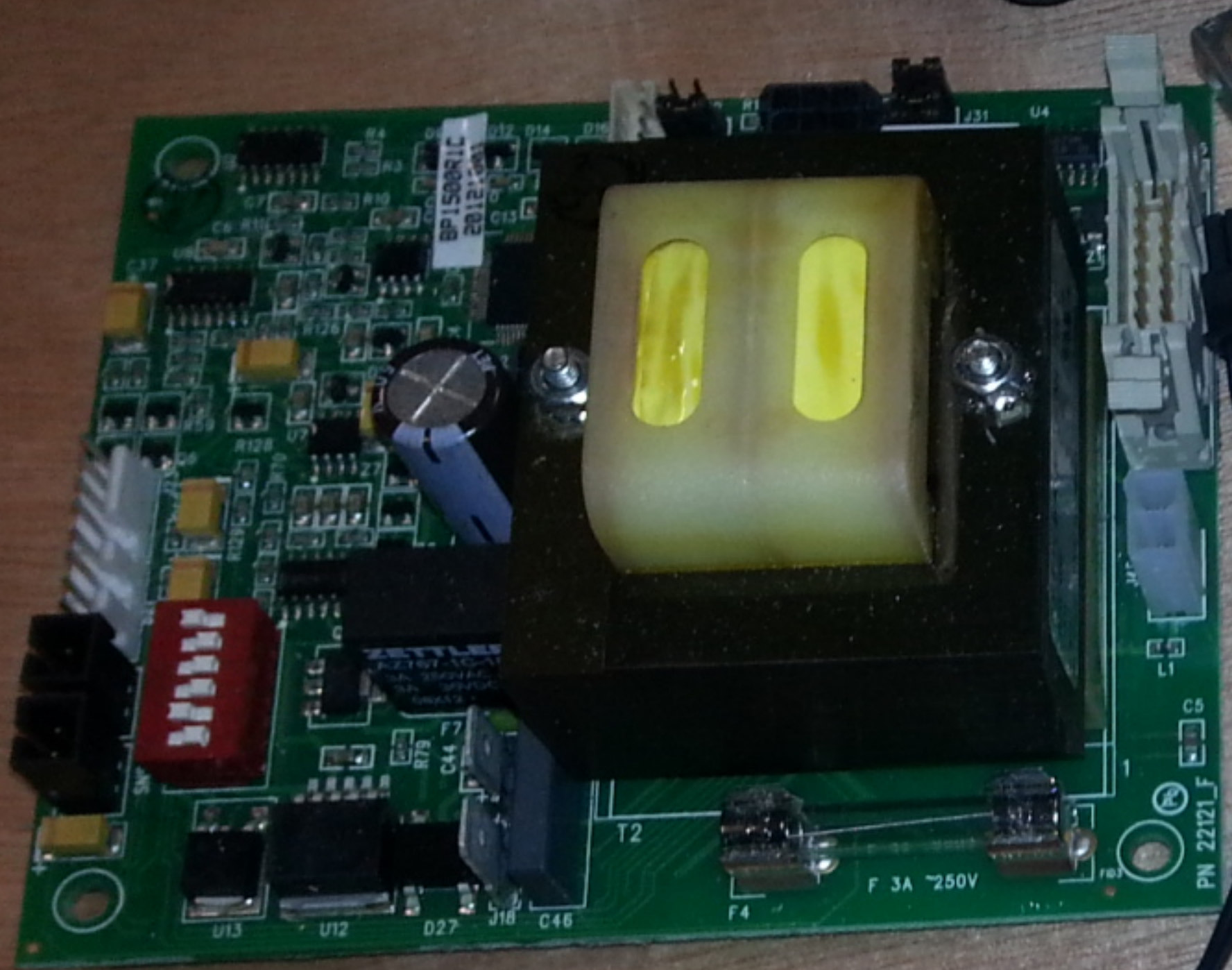
*SWITCH # 6 SHOULD BE SET TO OFF UPON FINAL INSTALLATION.



OUTPUTS

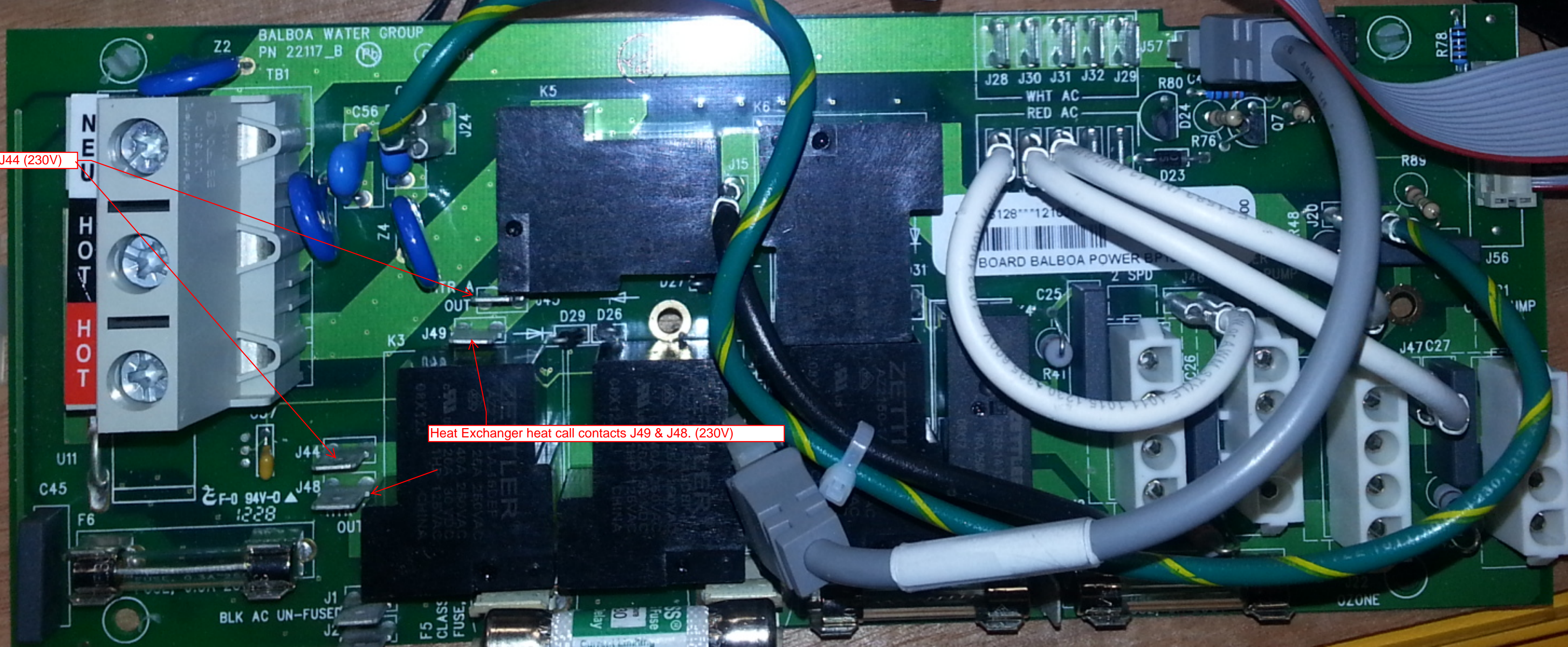
- 2-Speed P1
240 VAC 12A Max
- 1-Speed P2
240 VAC 12A Max
- Ozone
240 VAC .5A Max
- Heater
240 VAC 4kW
- Spa Light
12 VAC 1A Max
- J23 & J32
Misc 120 VAC Out
In-line Fuse Required

Heat exchanger (red) 230V J49 and J48

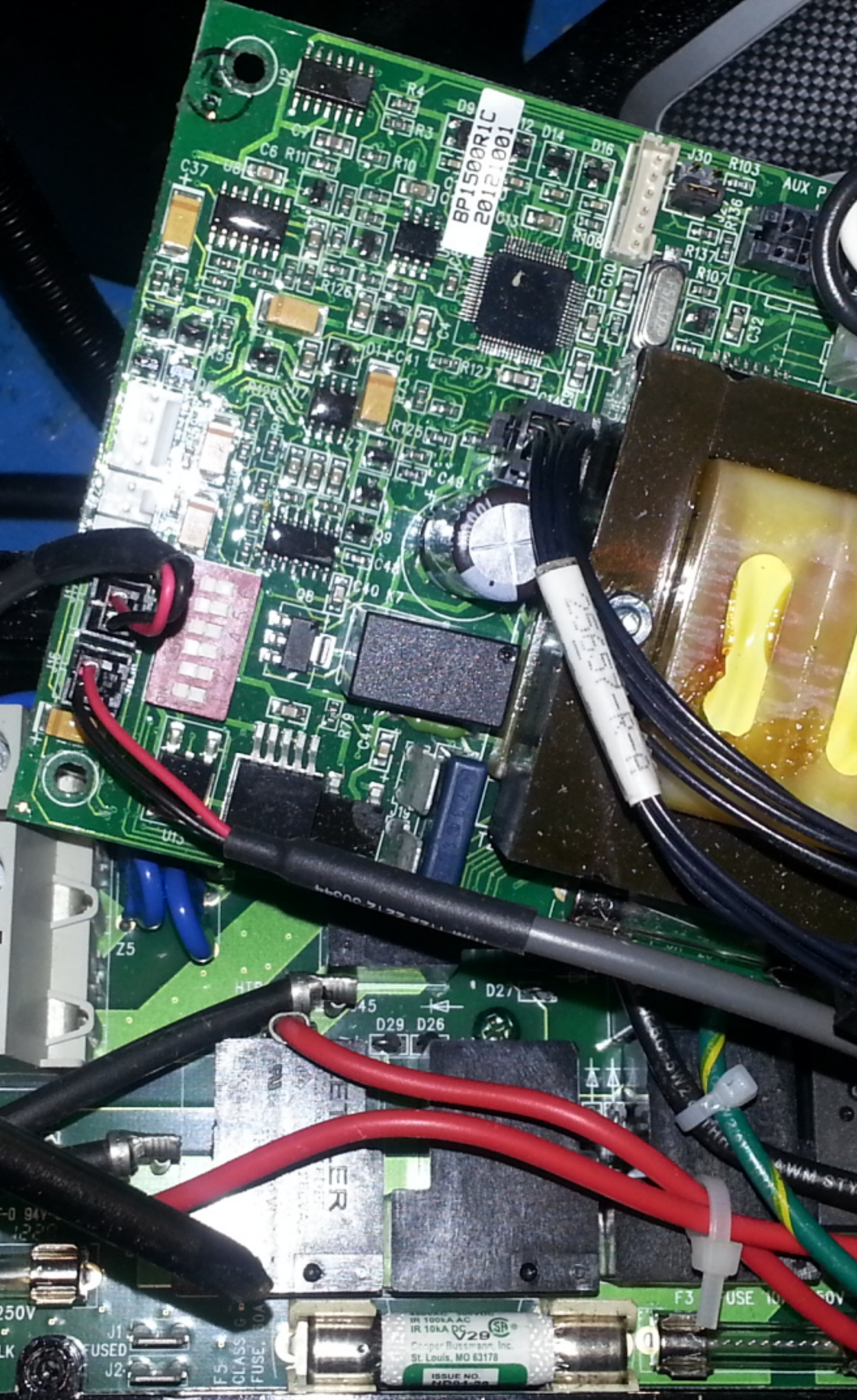


Electric heater loads J 45 & J44 (230V)

Heat Exchanger heat call contacts J49 & J48. (230V)



WARNING
Always wear ANSI approved safety glasses
Distributed by
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www.harborfreight.com



HOT
HOT

FUSE, 0.3A 250V

IR 100KA AC
IR 10KA DC
V20
Cooper Bussmann, Inc.
St. Louis, MO 63178
ISSUE NO. MED-0000

AWM STYLE 1011, 1013

OZONE